Japan's Business Reinvention: New Competitiveness through Business Model Innovation in the DX

再興 THE KAISHA: DX時代のビジネス・モデルイノ ションと国際競争力

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The "Showa Business Model"

- Postwar Japan industrial policy: geared toward size
 - Success measured in sales and employment: the bigger the better
 - Access to talent, technologies, trade quotas; stock price; higher pay
- Companies grew through diversification: business units and subsidiaries
 - The "bubble economy" drove that to excesses
 - After the bubble ended, the "3 excesses": debt, people, assets
- ・ After 1998: first wave of "choose-and-focus" 選択と集中
 - Exits, sell-outs, reorganization
 - "Strategic inflection point" and new corporate laws
 - Mostly "low-hanging fruit": non-performing or non-core businesses



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Choose and Focus v. 2.0

- 技のデパート
 - "The Store of Superior Techniques"
- Go on a diet, plus
- Become a completely different athlete
 - Outsmart the others
 - Compete through technology, not size
 - Create dependencies so as to profit from their successes
- Change the "identity" of the company
 - Core competencies and business sectors
 - Corporate culture

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AKITO TANAKA, Nikkei senior staff writer 2019 Huawei P30Pro JUNE 26, 2019 16:42 JST 1,631 parts, \$364 production cost China: 38% Japan: 23% South Korea: 8% Taiwan: 8% Not counted: Filters, oscillators, vibrators, contacts Inputs that Japan shipped to Taiwan and Korea for parts production • Photoresists, etc. LCD production machinery i.e., the expensive components were not assessed UC San Diego



Capturing Value in the Global Supply Chain





Implications | The aggregate niche strategy



Japanese companies now anchor the Northeast Asian trade.

New competitive balance in Asia



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Leading Japanese companies are changing their core identity and innovation strategies.

Leaders in B2B advanced input materials (Sony, Panasonic, Mitsubishi Materials, Mitsui Chemical, etc.) Platform providers, data players, connectivity (Hitachi, Mitsubishi Electric, FANUC, etc.) DX leaders in digital manufacturing (DMG Mori, Hitachi, Keyence, Omron, Sony, etc.)

Korea, Taiwan and China are dependent on

Japanese inputs

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• Digital Transformation = "DX"

- also CX, IX, BX (corporate/industry/bio)
- sometimes called 4IR, "fourth industrial revolution")

• No "DX" in the U.S. yet

- portemanteu words for the disruption, ending with "tech"
 - fintech (financial services), insurtech (insurance), agrotech (agriculture), proptech (real estate), matech (marketing), medtech (health sciences and medical devices)
- For manufacturing: "Industry 4.0"
- For society overall: "Society 5.0"



(1) Digital Manufacturing

New

Vocabulary

- From economies of scale to super-efficient "single-piece" manufacturing
- Industry 4.0: all parts and products have a "digital twin"
- Changes the nature of "work" and requisite employee skills

(2) Servitization

- Emergence of "as a Service" "x-aaS"
 - \succ MaaS: mobility as a service, LaaS: transportation/logistics as a service
- New industries, e.g.: HaaS Housekeeping as a service
- Technical definition: when core profit generation shifts from the sale of goods to the creation of benefits from using goods

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Value Creation and Value Capture in Industry 4.0

Future: Software Services: data-based value creation		Cloud syster	ns Operating	systems Da	atabase/Big Data	Al
				few use cas	ses yet, few applica	tions
Disruption now: Integrated Systems: value creation through advanced system solutions		Planning,	Logisti & rocess optimization	Small/single high customi	e lot, Cross- ization	company synergies, joint ordering
		Value creation through advanced equipment			Value creation through advanced software tools	
Current: Gemba/ Manut Shopfloor equi level	ent: ba/ bfloor Manufacturing equipment		Robots & machinery	Sensors, measurement equipment, connectivity	MES (manufacturin solution sy	& ERP software ng execution, enterprise stems, SCADA, SPS)











What will this look like in other industries?

- Lots of uncertainty: we don't know
- Some companies already have clear visions, others are falling behind
- Let's look at 3 quick examples from Japan



New Production *and* New Use Patterns

*CASE: Connectivity, Autonomous, Sharing/Subscription and Electrification

The Car Industry of the Future

- You will have a subscription service, just like Spotify for music
- When you need to go somewhere, you launch an app
 - A (self-driving) car parked in your area: you get the key code
 - A car-sharing service will pick you up (like Uber today)
 - A flying car will arrive within 10 minutes
- Pricing model: subscription and/or usage fee
 - While you are in the capsule, you will be sold other services
- The capsule (car) is completely standardized, the services are personalized

The Future Toyota?

- Today: sells 9 million cars annually, about \$300 billion
- 2030 vision: sell almost no cars, just provide transportation
- Mobility-as-a service
 - Similar to Spotify, Netflix
- "Car worker of the future":

Strategy takeaway: this means new manufacturing processes, new products to develop, new ways to generate profits, new global competition, and a need for a new type of employee.

Could this be

the reality by

2030?

















